

10 JUN 21 AM 6: 36

April 27, 2010

Osage ENR Office First National Bank Building 100 W. Main St., Suite 304 Pawhuska, Oklahoma 74056

Re:

Lease Name: North Burbank Unit Tract 14

Well No .:

W24

Location:

SE/4 Sec 10-T27N-R05E

Osage County, Oklahoma

#### Dear ENR Personnel:

Please find Chaparral Energy, L.L.C.'s CO2 Permit Application for the referenced well. This well is currently a "By-Rule" water injection well and that will not change. However, in discussion with EPA personnel in Dallas, it was found necessary to permit this well for the CO2 injection also. This way the well can be used to inject both types of fluid. Notice we said fluid because at the temperature and pressure we are proposing the CO2 which is normally thought of as a gas will be in its liquid state.

Chaparral is undertaking a large project to bring all the wells in the area of this well up to standards which will contain the CO2 within the Burbank Injection Zone. We are also enclosing Form 139's which have been filed with the Bureau of Indian Affairs Osage Agency to workover surrounding producing and shut-in producer wells. This should show you and the EPA that Chaparral is serious about containing CO2 within the Burbank. Since CO2 is a commodity which Chaparral will purchase and transport to the Unit for use, Chaparral does not want to lose it to other zones or the atmosphere.

We have explained to EPA permitting personnel in the Regional Office that there is a pressure factor involved with this injection which must be met to obtain adequate reservoir pressure to obtain miscible flooding. That pressure is believed to be near 1060 psig for the Burbank at our proposed injection temperature. This will help create the most efficient WAG (water and gas) Flood.

Osage ENR Office April 27, 2010 Page 2 of 2

If you have any questions or need more data, please contact us at the address listed.

Sincerely,

Chaparral Energy, L.L.C.

David P. Spencer
Manager CCP Manager of Regulatory Affairs Direct Number: (405) 426-4397 Direct Fax: (405) 425-8897

E-Mail: david.spencer@chaparralenergy.com

Enclosures

Mr. Ray Leissner, EPA Region 6, 1445 Ross Ave., Suite 1200, Dallas, Texas 75202 cc:

# PERMIT APPLICATION PACKAGE



### OSAGE NATION UIC

FIRST NATIONAL BANK BLDG. 100 W. MAIN ST., STE. 304 PAWHUSKA, OK 74056

Tel: 918/287.5333

Fax: 918/287.5581

Most injection wells which are currently operating in Osage County are "Authorized By Rule" (ABR) and need not apply for an individual permit. However, wells in the following categories must apply for and receive an EPA permit to construct or operate oil and gas related injection wells in Osage County:

- 1. Any well constructed or completed after December 30, 1984;
- 2. Any production well converted to an injection well after December 30, 1984;
- 3. In a utilized operation, any new well which is not authorized by a pervious permit;
- 4. Wells which the operator wishes to operate outside rule requirements (e.g., at a higher pressure than authorized by rule.).
- 5. Wells which were authorized by rule but have not been identified as one of the following:
  - being in violation of the rule;
  - no longer within the category of rule authorized well;
  - needing additional restrictions to protect underground source of drinking water (USDW's).\*\*\*

Please include or reference all the information requested in this package so that we may quickly process your application without delay. A copy of this application package will be immediately forwarded to the Osage Agency BIA and EPA.

At any time, if you have questions about the information requested, please call our office at 918.287.5333. We will be happy to assist you.

\*\*\*Operators of wells in this category will receive a letter from the Dallas EPA directing them to apply for a permit.

Well Name & No.:	Permit #:
3d	Date Rec'd:

### PERMIT APPLICATION CHECKLIST

	Attached	Not Attached	
1.			Osage Form 139, "Application for Operation or Report on Wells.
2.			Osage Form 208 "Completion Report".
3.			Copy of Plat Map showing wells within 1/4 mile radius of proposed well.
4.			Tabulation of data on wells within 1/4 mile radius including well name, company name, date drilled, depth, exact location, status of well & record of pluggings/completions.
5.			Injection well schematic showing total depth and plugback depth, depth from top & bottom of casing(s) & cemented intervals, cement amount, depth & size of casing & tubing, including depth of packer.
6.			Operating data including: type of well; maximum and average injection rate; source and analysis of injected fluids including TDS, chlorides and additives; major geological formation with top bottoms.
7.			Geological data of the injection zones including name(s), total thickness, porosity, lithologic description, permeability, injection depth, reservoir pressure/fluid level. Address the presence or absence of faults.
8.			Public Notice verifications, consisting of a list showing names, addresses, and date that notice of permit application was given or sent to the surface land owner, tenants of land where the injection well will be located, each operator of a producing lease within ½ mile of the well location.
9.			All available logging & testing data of the well attached.

	Attached	Not Attached	
10.	·		Copy of surety bond filed with the BIA superintendent (25 CFR §266.6).
11.			Certification form signed by the well owner/operator or authorized representative. (Authorization must be attached & in writing.)
12.	YES	МО	Has the applicant declared any part of his submission as confidential? {147.2907}
13.	YES	NO	Is the well currently Authorized by Rule? If yes, Inventory No
14.	YES	NO	Was the applicant required by EPA to apply for a permit?
15.	YES	NO	Is the permit applicant the owner/operator. (Circle one or both.)
16.	YES	NO	Has the applicant requested emergency authorization to inject? If yes, attach emergency checklist.
$\bigcirc$	YES	NO	Berms and all facilities associated with saltwater system adequate?
Pawh	iuska Technician/Admi	inistrative Review	Date
10			
6W-S	E Reviewer		Date

52 (0.05) 40		
N		D
Dwner/Operator:		Permiti
strict operacor.	Parameter and the second secon	1 C111116/

#### PERMIT TRACKING PROCEDURE CHECKLIST

<u>Date</u>	<u>Initial</u>	
2		Application logged in; Number Assigned & Receipt Date Stamped on Application.
	-	Application reviewed for completeness.
		Surety bond attached.
		Operator notified of incompleteness.
		Application terminated due to no response within 30 days.
		Application determined complete & file started on well.
		Completion letter mailed to operator.
		Transmitted copy to BIA & EPA.
		RBDMS data entered & well schematic prepared.
		Date of 6-W Signature.
<del></del>	-	Draft Permit, Statement of Basis, Public Notice & Letter of Intent signed & mailed to operator & BIA.
		Data Entry Accomplished.
		Public Notice submitted to newspaper.
		Public Notice publication verified.
		Comment Period Ends.
P.		Comments reviewed & 6W decided whether to hold public hearing.   YES NO
		Permit Finalized & Response to Comments prepared. (IF REQUIRED)
		Final Permit Approved; Returned for concurrence if different from Draft Permit.
	4	Final Permit, Cover Letter to Operator; Responsiveness Summary, etc. sent to applicant, Osage UIC & BIA.
		Responsiveness Summary including Final
		Permit decision mailed to appropriate parties.
)		Permit effective date:
		Complete inventory data sheet & complete data entry.
		Permit appealed to Administrator? YES NO
		- Proof of MIT mailed to Dallas

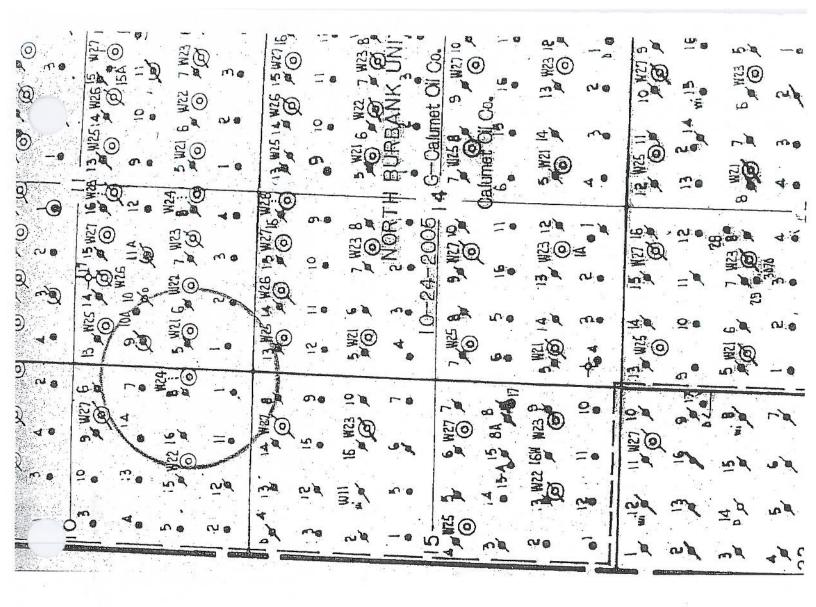
#### **United States Department of the Interior** Osage Indian Agency

Pawhuska, Oklahoma

Date:

April 15, 2010

Fee Land	North Bur	bnak Unit Tra	ict 14			
(Commencement money paid to wh	nom) (	Date)			(Amount)	
Well No.: W24 is	located 890	_Ft. from S	line and	75 I	Ft. from E lin	е
SE/4 Sec 10	27N	05	Ε	Osage Cour	nty, Oklahon	na
(1/4 Sec. & Sec. No.)	(Twp)	(Rar	nge)			
The elevation of the	ground level	_above sea	level is	1120.24	Ft.	
		<del>-</del>			OS #0201	
Use This Side to Request Au		Use Th			Complete	Work
(Three Copies Requi	red)			ne Copy Requ		
Notice of Intention To:		H		(oil, gas o	ordry)_	
Drill	3	11	The contract of the profession of	t Report of:		
Plug [				1		
Deepen or plug back [				Treatment.		
Convert			Altering cas	sing		
Pull or alter casing [	X		Plugging B	ack		
Formation Treatment. I	3		Plugging			
	ze & length of casings nt of proposed work nority granted for  Bbis water in 24 hrs	- 11	Details of V	Vork & Resu	lts Obtained	
This is a by rule water injection well use this well to to also inject CO2 in project. Will MIRU POOH w/ all cumpkr. Set CIBP @ end of 4½" csg. Pt to 500 feet above it & POOH w/part RIH w/ 4½" retainer & set above bo Class A cement behind 4½". WOC, cmt to CIBP. RIH w/3½" 9.5# slim li 200' chrome lined for CO2 service.	n a WAG EOR rent injection tbg & erf 4½" from CIBP ded 4½ @ 500 ft. ttom perfs & sqz drill out retainer & ine csg w/bottom	Worl W	block for	e on reverse if	nformatio	n only
& sqz cmt behind surface csg if pos	ssible (OVER)	Size	In Hole When Started	Arnt. Recovered	If Parted	
I understand that this plan of work must recoviring of the Osage Indian Agency before	eive approval in				Depth	How
may be commenced.	, p = 1 2 (10)					
Lessee: Chaparral Energy, L.L.C	<u>).</u>					
Signature: David P. Spencer	ey	Lessee			Original TD_	
Title: Manager of Regulatory	Affairs		orn to before me this	day of	2010	***
Address: 701 Cedar Lake Blvd., Oklah	oma City, Oklahoma 731		an to believe the this	cary or		



North Burbank Unit 14-W SE/4 Sec 10-T27N-R05E Osage County, Oklahoma Quarter Mile Radius Map



rosed	Inj Well			ON ZONE	
vvoil Nam	€NBU 14-1	Com	npany Name Phillips Petroleum Co Da	ate Drilled 1/1	13/1924 Depth 3093 '
Location	300'FS	L & 300	O'F <u>E</u> L, <u>SE</u> /4, Sec. <u>10</u> , T <u>27</u>	N, R <u>05</u> E	Status Shut-in Producer
Elevation	1184	X GL K	* SEE ATTACHED FORM	139 FOR PR	OPOSED CEMENTING
Hole Size	Casing Size	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
'	20 '	55			1
'	12½	582	To be squeezed from 500' to surf	Surf	1
1	8-5/8	2386	To be squeezed from 500' to surf and from 2286-2050'.	Surf	1
1	7'	2762	To be squeezed from 500' to surf and from 2750-2050'.	Surf	1
,	31/2 '	2750	To be cemented to surface before CO2	Surf	1
Formatio	ns Open To	Wellbore:	Burbank (Openhole 2762' - 3093')	- <b></b>	
******	*****	*****	**************		
Well Name	e NBU 14-7	Com	pany Name Phillips Petroleum Co. Da	ite Drilled 3/2	1/1924 Depth 2988 '
Location	<u>988</u> 'FN	L & 300	O'F <u>E</u> L, <u>SE</u> /4, Sec. <u>10</u> , T <u>27</u>	_ N, R <u>05</u> E	Status Shut-in Producer
Elevation	1101	X GL KE	* SEE ATTACHED FORM	139 FOR PRO	OPOSED CEMENTING
Hole Size	Casing Size	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
- "	20 ''	20 '			1
и	15½ "	21 '	To be squeezed from 500' to surf	Surf	1
***	8-5/8 "	2283 '	To be squeezed from 500' to surf and from 2283-2040'.	Surf	,
	7 "	2758 '	To be squeezed from 500' to surf and from 2740-2040'.	Surf	1
"	3½ "	2740 '	To be cemented to surface before CO2	Surf	1
Formation	s Open To	Wellbore:		1=	<u> </u>
			Burbank (Openhole 2758' - 2988')		
*****	*****	*****	*************	*****	*******
Well Name	NBU 14-8	Com	pany Name Phillips Petroleum Co. Da	te Drilled 3/2	3/1924 Depth 3040 '
Location	988'FS	L & 300	'FEL, <u>SE</u> /4, Sec. <u>10</u> , T <u>27</u>	N, R <u>05</u> E	Status P&A'd in 1964
Elevation	1126	X]GL[]KB			
Hole Size	Casing Size	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
· · ·	20 '	20 '			Cemented formation thru pkr @ 2720' w/ 50
u	10 "	222 '	From 1480 to 1258' stuck in hole		sx Reg. & 30% Diacel "D". Cut off 7" &
"	8-5/8 '	2303 '	The state of the s		POOH w/2702'. Dump 10 sx Reg @ 2650'. Cut & POOH w/ 1775' of 8-5/8". Dump 15
11	7 ''	2777 '			sx Regw30% Diacel "D" @ 110' & fill to surf.
#1	. 14				Fill cellar w/5 sx Reg. from 5' to 3' below GL.
"	10	,			<del>.</del>
ation	s Open To \	Nellhore:	NONE	I	1
*********	Pon 10 1	*******	*********	*****	

********	reii ine	BU 14-W24	***********	****	******
Well Name NBI	J 14-11	Comp	oany Name Phillips Petroleum Co. Da	te Drilled 3/3	1/1924 Depth 3109 *
Location 30	<u>0</u> 'F <u>S</u> L	_ & 978	'FELL, SE /4, Sec. 10 , T 27	N, R <u>05</u> E	Status Shut- in Producer
Elevation11	89	K]GL∏KB	* SEE ATTACHED FORM	139 FOR PRO	DPOSED CEMENTING
<u>Size</u> <u>S</u>	asing Bize	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 '	20 '			'
"	8-5/8 "	2390 '	To be squeezed from 500' to surf and from 22390-2060'.	Surf	'
. 11	7 ''	2781 '	To be squeezed from 500' to surf and from 2781-2060'.	Surf	'
"	31/2 "	2760 '	To be cemented to surface before CO2	Surf	
"					'
Formations O	pen To W	Vellbore:	Burbank (Openhole 2781'-3109')		
********	*****	*****	*************	******	*******
Well Name NBI	J 14-14	Comp	oany Name Phillips Petroleum Co. Da	te Drilled 4/1	4/1924 Depth 3031 '
Location 100	02'FN_L	_ & 977	'FEL, <u>SE</u> /4, Sec. <u>10</u> , T <u>27</u>	N, R <u>05</u> E	Status Shut-in Producer
Elevation 11	07	K]GL∏KB	* SEE ATTACHED FORM	139 FOR PRO	DPOSED CEMENTING
	Size	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
	20 ''	20 '			
"	12½"	486 '			•
",	8-5/8 "	2312 '	To be squeezed from 500' to surf and from 2312-2060'.	Surf	,
"	7 "	2782 '	To be squeezed from 500' to surf and from 2782-2060'.	Surf	'
"	3½"	2760 '	To be cemented to surface before CO2	Surf	1
Formations O	pen To W	Vellbore:		***************************************	
		sa ann an ann ann ann ann an ann an a	Burbank (Openhole 2782' - 3031')		
********	******	******	**************************************		
Well Name NBL	J 14-16	Comp	oany Name Phillips Petroleum CoDa	te Drilled <u>5/5</u>	/1924 Depth 3031 '
Location 100	02'F <u>S</u> L	_ & 978	'F <u>E</u> L, <u>SE</u> /4, Sec. <u>10</u> , T <u>27</u>	N, R <u>05</u> E	Status P&A'd in 1963
Elevation 11	33	K]GL[]KB			
	asing Size	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
u	20 "	20 '			Sealed formation by spotting 40sx
"	15½"		Stub left when pulled @ 1480'		Regw/30% Diacel "D" @ 2984'. TOC
11	8-5/8 "	2325 '			@ 2890'. Parted 7" & POOH w 2575'. Dump 10 sx Reg @ 2560'. Parted 8-
п	7 '	2771 '			5/8" @ 1755' & POOH w/same.
		Am I I I		1	
"	4.0	1			, Mudded hole to surf. Fill cellar 5 sx
11	t = 1 5	1			Mudded hole to surf. Fill cellar 5 sx Reg.

osed Inj Well NBU 14-W24		
Well Name NBU 14-W22 Company Name Phillips Petroleum Co. Da	ate Drilled 7/3	3/1963 Depth 3045 '
Location <u>890'FS_L &amp; 1245'FWL, SE</u> /4, Sec. <u>10</u> , T <u>27</u>	7_ N, R <u>05</u> E	Status Active Injector
Elevation 1140 X GL KB * SEE ATTACHED FORM	139 FOR PR	OPOSED CEMENTING
Hole Casing Landed Size Size Depth Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
" 8-5/8 " 118 105 sx Reg	Surface	1
" 4½" 3003 1 75 sx Reg w/ 30% Diacel "D"	?	1
" 3½" 2980 Cmt to surface prior to CO2.	Surface	1
11 11 1		1
0 1 1		1
Formations Open To Wellbore: Burbank (Openhole 3003' - 3045')		
***********************	****	**********
Well Name NBU 15-1 Company Name Phillips Petroleum Co. Da	ate Drilled 5/9	9/1924 Depth 3046 '
Location 300'FS L & 300'FW L, SW /4, Sec. 11 , T 27	N, R 05 E	Status Shut- in Producer
Elevation 1131 X GL KB		
Hole Casing Landed Cement & Additive Data	Top of	If well is TA or P&A Describe
ze <u>Size Deptil</u>	Cement	How:
20 20		
" 10 " 607 ' To be squeezed from 500' to surface.	Surface	1
" 8-5/8 <sup>11</sup> 2338 <sup>1</sup> To be squeezed from 500' to surf and from 2338-2060'.	Surface	1
7 1 2783 To be squeezed from 500' to surf and from 2788-2060'.	Surface	•
" 3½ " 2760 ' To be cemented to surface before CO2	Surface	1
Formations Open To Wellbore:		
<u>Burbank (Openhole 2783 - 3046')</u>		
Well Name NBU 15-2 Company Name Phillips Petroleum Co., Da	**************************************	**************************************
Well Name NBU 15-2 Company Name Phillips Petroleum Co Da	ite Drilled 6/2	24/1924 Depth 3075 '
Location 300'FS L & 981'FW L, SW /4, Sec. 11 , T 27	N. R 05 E	Status Shut-in Producer
	_	
Elevation 1151 X GL KB	17	
Hole Casing Landed Size Size Depth Cement & Additive Data	Top of	If well is TA or P&A Describe
	Cement	How:
20 19		1
15½" 496 To be squeezed from 500' to surface.		
	Surface	1
" 10 " 1036 To be squeezed from 500' to surface.	Surface Surface	1
" 10 " 1036 ' To be squeezed from 500' to surface. " 8-5/8 " 2375 ' To be squeezed from 500' to surf and from 2375-2110'.		1
" 10 " 1036 ' To be squeezed from 500' to surface. " 8-5/8 " 2375 ' To be squeezed from 500' to surf and from 2375-2110'. " 7 " 2833 ' To be squeezed from 500' to surf and from 2833-2110'.	Surface	1
" 10 " 1036 ' To be squeezed from 500' to surface. " 8-5/8 " 2375 ' To be squeezed from 500' to surf and from 2375-2110'.	Surface Surface	1

****	Inj Well <u>I</u>	VBU 14-W24	*********	****	
V Name	e NBU 15-5	Com	pany Name <u>Phillips Petroleum Co.</u> D	ate Drilled <u>5/2</u>	7/1924 Depth 3022
Location	981 'FS	_L & 300	'F <u>W</u> L, <u>SW</u> /4, Sec. <u>11</u> , T <u>27</u>	7_ N, R <u>05</u> E	Status P&A'd in 1963
Elevation	1106	X]GL[]KB	* SEE ATTACHED FORM	1 139 FOR PR	OPOSED CEMENTING
<u>Hole</u> <u>Size</u>	Casing Size	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	<u>Top of</u> Cement	If well is TA or P&A Describe How:
"	20 '	20 '			Spotted 120 sx Reg w/30% Diacel "D"
•	15½'	598 '			to plug formation @ 2941'. Tag TOC
"	10 '	1319 '			@ 2500'. Part 7" & POOH from 2410' Spot 10 sx Reg @ 2380'. Parted 8-
10					5/8" @ 1805' & POOH w/ same.
**				~	Parted 10" @ 1020 & POOH w/ same
Formation	ns Open To \		NONE	3 3777 37173	Mudded hole to surf.
*****	*****	*****	******	****	
		L & 981	'F <u>W</u> L, <u>SW</u> /4, Sec. <u>11</u> , T <u>27</u> * SEE ATTACHED FORM		
			SEE ATTACHED FORM		
Hole Size	Casing Size	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 ''	8 '			Spot 50 sx Reg w30% Diacel "D"
	15½"	18 '			@ 2960'. Tag TOC @ 2574'.
**	10 "	545 '			Parted 7" @ 2350' & POOH
11	8-5/8 ''	2318 '			w/same. Spot 10 sx Reg @ 2350'. Parted 8-5/8" @ 2110' & POOH w
"	7 ''	2808 '			same. Mudded hole to surf w/
- 11	5½ "	2960 '	2777-2960'		heavy mud.
Formation	s Open To V	Vellbore:	NONE		
Vell Name	NBU 15-9 981 ' F <u>N</u>		any Name <u>Phillips Petroleum Co.</u> Da	ate Drilled 5/1	8/1924 Depth 2993  Status P&A'd in 1997
Elevation	1089	X GL KB			
Hole Size	<u>Casing</u> <u>Size</u>	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
	10				Spot 45 sx plug @ 2900'. Tag TOC @ 2000'.
11	20 '	20 '			Shootoff 7" & 8-5/8" @ 435' POOL w/7" Cariffan
	20 '' 8-5/8 ''	20 '			Shootoff 7" & 8-5/8" @ 435'. POOH w/7" Couldn pull *-5/8". Perf 8-5/8" @ 418',
14					Shootoff 7" & 8-5/8" @ 435". POOH w/7" Couldn   pull *-5/8". Perf 8-5/8" @ 418",   350',300',250',200', 150', & 100'. RIH w/ Ws to
	8-5/8 ''	2310 ' 2750 '	Liner from 2616 - 2792' cmt w/50 <b>sx Reg</b>		Shootoff 7" & 8-5/8" @ 435'. POOH w/7" Couldn' pull *-5/8". Perf 8-5/8" @ 418', 350',300',250',200', 150', & 100'. RIH w/ Ws to 400' & pump 300 sx 50/50 poz cmt w/ no returns WOC & tag cmt @310'. Pump 300 more sx
H 11	8-5/8 '' 7 ''	2310 ' 2750 '	Liner from 2616 - 2792' cmt w/50 <b>sx Reg</b>		Shootoff 7" & 8-5/8" @ 435'. POOH w/7" Couldn' pull *-5/8". Perf 8-5/8" @ 418', 350',300',250',200', 150', & 100'. RIH w/ Ws to 400' & pump 300 sx 50/50 poz cmt w/ no returns
H H H	8-5/8 '' 7 ''	2310 ' 2750 '	Liner from 2616 - 2792' cmt w/50 <b>sx Reg</b>		Shootoff 7" & 8-5/8" @ 435'. POOH w/7" Couldn pull *-5/8". Perf 8-5/8" @ 418', 350',300',250',200', 150', & 100'. RIH w/ Ws to 400' & pump 300 sx 50/50 poz cmt w/ no returns WOC & tag cmt @310'. Pump 300 more sx 50/50 poz cmt. WOC & tag TOC @ 46'. Circ 125

Veril Name NBU 15-10   Company Name Phillips Petroleum Co.   Date Drilled 6/8/1924   Depth   2986'	osed	Inj Well	NBU 14-W24	***************************************	1014 2014L	
Size	Vveil Nam	€NBU 15-10	) Com	pany Name Phillips Petroleum Co. D	ate Drilled 6/8	/1924 Depth 2986' '
Hole   Size   Size   Depth   Cement & Additive Data   Top of Cement   How;	Location	<u>981</u> ' F <u>N</u>	_L &   981	'F <u>W</u> L, <u>SW</u> /4, Sec. <u>11</u> , T <u>2</u>	7_ N, R <u>05</u> E	Status P&A'd in 1963
Size   Size   Depth   Cement & Additive Data   Cement   How.     20   92	Elevation	1085	X GL KE	* SEE ATTACHED FORM	1 139 FOR PR	OPOSED CEMENTING
Well Name NBU 15-10A   Company Name Phillips Petroleum Co.   Date Drilled   7/10/1963   Depth   3002		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	200	Cement & Additive Data		
						w/30% Diacel "D" @ 2926'. Tag TOC @
Formations Open To Wellbore:   None   None		1	2740			Spot 10 sx Reg @ 2600'. Parted 8-5/8" @ 500' & POOH w/same. Mud hole to surf
Well Name NBU 15-10A   Company Name   Phillips Petroleum Co.   Date Drilled   7/10/1963   Depth   3002			,			w/heavy mud.
Location   927   FN   L & 927   FW   L   SW   /4   Sec.   11   T   27   N   R   05   E   Status   Shut-in Producer	Formatio	ns Open To	Wellbore:	None	*****	********
Elevation   1090   X   GL   KB	Well Nam	e <u>NBU 15-10</u>	A Com	pany Name <u>Phillips Petroleum Co.</u> Da	ate Drilled 7/1	0/1963 Depth 3002 '
Hole   Casing   Landed   Depth   Cement & Additive Data   Top of   If well is TA or P&A Describe   How:     10½   119   90 sx Reg	Location	927 ' F <u>N</u>	L & 927	'F <u>W</u> L, <u>SW</u> /4, Sec. <u>11</u> , T <u>27</u>	N, R 05 E	Status Shut-in Producer
Size   Depth   Cement & Additive Data   Cement   How:     103/4   119   90 sx Reg   Surface       7   2940   2220 Also cmt from 500' to surf.     31/2   2920   To be cemted to surface before CO2 injection.   Surface       " 31/2   2920   To be cemted to surface before CO2 injection.   Surface       " "   "                   Formations Open To Wellbore:   Burbank (Openhole 2940' - 3002')    Well Name   NBU 15-W21   Company Name   Phillips   Petroleum   Co.   Date   Drilled   6/23/1963   Depth   3061       Location   890' FS   L & 565' F W L   SW   /4   Sec.   11                               Elevation   1124   X GL   KB     KB	Elevation	1090	X]GL[]KE	* SEE ATTACHED FORM	139 FOR PRO	DPOSED CEMENTING
10/4			A-112 (1.012)	Cement & Additive Data		
	<u> </u>	103/4 '	119 '	90 sx Reg	Surface	1
To be cemted to surface before CO2 injection.   Surface		/	2940 '	4/ 5x Reg w/30% Diacel "D". To be sqz so TOC @ least 2220'. Also cmt from 500' to surf.	Surface	1
Formations Open To Wellbore:   Burbank (Openhole 2940' - 3002')		3/2	2920 '	To be cemted to surface before CO2 injection.	Surface	1
Formations Open To Wellbore:  Burbank (Openhole 2940' - 3002')  Well Name NBU 15-W21			1			
Burbank (Openhole 2940' - 3002')			1			
Well Name NBU 15-W21         Company Name Phillips Petroleum Co. Date Drilled 6/23/1963 Depth 3061 '           Location         890 ' FS L & 565 ' FW L, SW /4, Sec. 11 , T 27 N, R 05 E         Status Active Injector           Elevation         1124         X GL KB           Hole Size         Size         Depth         Cement & Additive Data         Top of Cement How:         If well is TA or P&A Describe How:           " 8-5/8"         118 ' 105 sx Reg         Surface '         Surface '           " 4 ½ ' 3003 ' 2220'. Also cmt from 500' to surf.         Surface '         Surface '           " 3½ ' 2980 ' To be cemted to surface before CO2 injection.         Surface '	Formation	ns Open To	Wellbore:			
Location   890 ' F S	****	*****	******	Burbank (Openhole 2940' - 3002')		
Hole   Casing   Landed   Cement & Additive Data   Top of   If well is TA or P&A Describe   How:	Well Name	NBU 15-W2	21 Com	pany Name Phillips Petroleum Co Da	ate Drilled 6/2	3/1963 Depth 3061 '
Hole   Casing   Landed   Depth   Cement & Additive Data   Top of   Cement   How:	Location	890'FS	L & 565	'F <u>W</u> L, <u>SW</u> /4, Sec. <u>11</u> , T <u>27</u>	N, R <u>05</u> E	Status Active Injector
Size         Size         Depth         Cement & Additive Data         Cement         How:           "8-5/8"         118 ' 105 sx Reg         Surface '           "4 ½"         3003 ' 2220'. Also cmt from 500' to surf.         Surface '           "3½"         2980 ' To be cernted to surface before CO2 injection.         Surface '	Elevation	1124	X GL KB			
118   105 sx Reg   Surface			N	Cement & Additive Data		
" 4 ½ " 3003 ' 2220". Also cmt from 500' to surf. Surface ' 2980 ' To be cemted to surface before CO2 injection. Surface '	ıı.	8-5/8 "	118 '			
" 3½" 2980 To be cemted to surface before CO2 injection. Surface	11	4 ½ "		75 sx Reg w/30% Diacel "D". To be sqz so TOC @ least		
	"					
	"			nace sole of the injustion.		
77 .4 1	"	.10	ı			
71 10 1	"	10	1		2	
ations Open To Wellbore: Burbank (Openhole 3003' - 3061')		- O T- 1	Mallhara	Rurhank (Openhale 2003) 2061'		

	*******	******	***********	*********	********
ven Nam	ne NBU 15-W	<u>22</u> Com	pany Name Phillips Petroleum Co. [	Date Drilled 6/1	4/1963 Depth 3038
ocation.	890'FS	L & 1245	5'F <u>W</u> L, <u>SW</u> /4, Sec. <u>11</u> , T <u>2</u>	27 N, R <u>05</u> E	Status Active Injector
levation	1118_	X]GL[]KE	3		
<u>Hole</u> <u>Size</u>	Casing Size	<u>Landed</u> <u>Depth</u>	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
	" 8-5/8 "	113 '	100 sx Reg	Surface	1
	4 ½ "	2990 '	75 sx Reg w/30% Diacel "D". To be sqz. so TOC @ least 2270'. Also cmt from 500' to surf.	Surface	1
	" 3½"	2970 '	To be cemted to surface before CO2 injection.	Surface	1
	" "				1
	" "	,			1
-ormatio	ns Open To \	Nellbore:	Burbank (Openhole 2990' - 3038	')	
Ioll Nam	€ NBU 22-8	Com	nony Nome Singleto O 8 C C	\	7//00/
cation	5,-0001600000000 705		pany Name <u>Sinclair O &amp; G Co.</u>	0-33	
ocation	300 1 14	L & 300	'FEL, NE /4, Sec. 8 , T 2	7 N, R <u>05</u> E	Status P&Ad In 1963
evation	1154	X]GL[]KE	* SEE ATTACHED FORM	/ 139 FOR PR	DPOSED CEMENTING
<u>Hole</u>	Casing	Landed	Cement & Additive Data	Top of	If well is TA or P&A Describe
^i <u>ze</u>	Size	<u>Depth</u>	<u>- omont a radiave Bata</u>	Cement	How:
	20	20 '			Spot 65 sx Reg w/30% Diacel "D"
	12/2	1240 '	Stub from 1240 to 1118'		@ 3109'. Tag TOC 3015'. Rip 7" - 2820' & POOH w/same. Parted 8
	8-5/8	2475 '			5/8" @ 1550' & POOH w/same.
	1	2951 '			Mudded hole to surf.
					1
-ormatio	ns Open To V	Vellbore:	N		
******	******	******	None ************************************	****	********
ell Nam	€ NBU 23-13		2012 EXTREM DOLL REPRODUCTION OF THE PROPERTY OF THE RESERVE OF TH	ate Drilled 6/1	
	Management and a second			ate Billied Ort	9/1924 Верит
ocation	300'FN	L & 300	'F <u>W</u> L, <u>NW</u> /4, Sec. <u>14</u> , T <u>2</u>	7 N, R <u>05</u> E	Status P&A'd in 1963
evation	? [	]GL∏KB			
	and an entropy of the same				
	Casing Size	<u>Landed</u>	Cement & Additive Data	Top of	If well is TA or P&A Describe
Hole Size	SIZE	Depth 38 '		Cement	How: Seal off formation by cmt thru retainer @
Hole Size		38			2600' w/ 80 sx Reg w/30% Diacel "D".
Size	20 "				Parted 7" @2525' & POOH w/same. Parte
<u>Size</u>	20 " 15½ "	967 '			
Size	20 " 15½ " 10¾ "	967 <sup>'</sup> 1520 <sup>'</sup>			Parted 7" @2525' & POOH w/same. Parted 8-5/8" @ 2340' & POOH w/same. Parted 1034" @ 1310' & POOH w/same. Parted
Size	20 " 15½ " 10¾ " 8-5/8 "	967 <sup>1</sup> 1520 <sup>1</sup> 2423 <sup>1</sup>			8-5/8" @ 2340' & POOH w/same. Parted 10³/4" @ 1310' & POOH w/same. Parted 15½" @ 635' & POOH w/same. Then
Size	20 " 15½ " 10¾ " 8-5/8 "	967 <sup>'</sup> 1520 <sup>'</sup>			8-5/8" @ 2340' & POOH w/same. Parted 103/4" @ 1310' & POOH w/same. Parted

#### WELL SCHEMATIC

Operator: (Completion D	apara thereof Late: To Be Done	L.C.
Surface Eleva	tion: _//20	
		ALXXII.
Tubing Size: _ Weight: _ Length: _	23/8"	
Packer Type: Set at:_	Arrowset IX Conted	
	perforated above	
r 'er:to_	to;	
		<b>X</b>
Casing from 2	ow production 186' to 3050' present in open Lark Sand	
SURFACE CASI	NG DATA inches inches	\$\$\$\$\$
_asing size: Weight: Length:	32 lb/ft. /20 ft.	<b>XX</b>
ement type:	Class <u>A</u> 110 sx. None	
additives: _asing set at:_ _op of cement	120 ft. : Surface ft.	XX
1-11-1-5		4
letermination	Circulated- Visual	
ć	2 "contet 5 Hog@ 2970' et un Arrow 1x	
	Hbg@ 2970'	A
5	er in throw IX	4

890 ft. (XXX/S) lin	<i>NBU 14-W24</i> ne and <u>75</u> ft. from { E ► CONTACT   14 CON
X X X X X X X X X X X X X X X X X X X	INTERMEDIATE LINER/CASING Hole size:
	PRODUCTION CASING DATA Hole size: 4½ inches Casing size: 3½ inches Weight: 9.5 lb/ft. Length: 2970 ft. Cement type: Class A Amount: 525 sx. Additives: 2766e/+276CaC1 Casing set at: 2970 ft. Top of cement: Surface ft. Method of determination Circulate - Visua
NA 278	PBTD: Not Affordicable TD: 3050  NOTE: All depths are to be from ground level. If KB depths are used, make notations on diagram and height of KB above ground level.

### WELL OPERATION & GEOLOGICAL DATA

Permit Number\_\_\_\_\_\_

Type of Injection Well: <u>EOR</u> (EOR / SW			Authorized	l By Rule) -Watov
Injection:	Di Tio Glorage)	-	19	
Rate (BAD): Average 4000 Fluid: Tds	MCF @ 1060 psig sp. Gr	Maximum	5000 MCF @ 1060 s Included: (本本書本	psig max. No)
Source (Formation name):_	Anthropogenic fr	om various sourc	ces	
Will anything be added to the	e water to be injected	1? (XXXXX No)		
What will those additives be	?			
Geologic Data:				
All references to depths ar				
Injection Intervals: 2980	to		_ to	*
Formation Name Burbank				
Permeability (md) 96				
Perforated or open hole inter	rval <u>Openhole fr</u>	om 2986' to 3050	) TD	
	1311		Dit. (0/)	
Formation Name	Litnolog	y	Porosity (%)	
Permeability (md)				
Perforated or open hole inter	vai		140.	
Current Fluid Lavel in Well	22 ft /halayy	land surface) and	/or	
Current Fluid Level in Well_				
Current Reservoir Pressure_		Date Not co	nverted yet	<del></del> 0
Drill Stem Test ( No ) I		1 ft		
Depth of nearest fresh water	Men(2) 100, 6 3 mm	les away		*
Facilities Associated with Inje	ction Well:			20
Adequate Berm around tank bat				
_eaking Flow Lines? ( ****** No	(5)			
Leaking Flow Lines: ( Access 140	,			
ormation:	au au			
The state of the s	200			
Top/Bottom From PBTD to Surfa		,	NO. 200 (24 V = 1)	
Checkerboard Lime	2090	100	1115'	
Big Lime	2590	/2	680'	_
Swego Lime	2705	/	785'	_
Burbank Sand	2980	/	050' TD	_
		1		

### APPLICANT'S PUBLIC NOTICE OF PERMIT AND VERIFICATION (§147.2918 (b) (s) and §147.2929 (d) (ii)

Chaparral Energy, L.L.C.	is applying for a permit for a Class II
(Operator Name)	
injection well. Well No. NBU 14-W24 is loc	ated890_ ft. from xxxxS] line and
75 ft. from [E xxx line. se/4 Section	n_10 27N 05E
. (1/4 Sec. & Sec.	No.) (Twp.) (Rge.)
The well will be used to inject co2 & Water	into theBurbank Sand
(Fluid Type)	(Formation Name)
for covery). The well oper	ator's address is
701 Cedar Lake Blvd., Oklahoma City, OK	
(Street/P.O. Box/City/State	∍/∠ip Code)
EPA may prepare a draft permit or a notice of interpreparation of a draft permit or intent to deny, the For further information concerning the status of the Osage UIC Office  P. O. Box 1495  Pawhuska, Okiahoma 74056  Phone: (918) 287-5333	ere will be an opportunity for public comments.
Notice Sent To: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	itor) Circle one
Chaparral Energy, L.L.C.	
Name	
701 Cedar Lake Blvd.	
Address	
Oklahoma City, OK 73114	8.
City / State / Zip Code	
certify that the surface owner(s), the tenants on	land where the injection well is located, and each
perator of a producing lease within one-half mile	of the well location was mailed a copy of this
notice as required by 40 CFR \$147.2918.	
Hart frences	April 26, 2010
Owner/Operator Signature) David P. Spencer	(Date of Notice)
bavid r. Spencer	

### APPLICANT'S PUBLIC NOTICE OF PERMIT AND VERIFICATION (§147.2918 (b) (s) and §147.2929 (d) (ii)

Chaparral Energy, L.L.C.		is applyir	ng for a permit for a Class II	
(Operator Name)	la la casa d	000	<i>"</i>	
injection well. Well No. NBU 14-W24  75 ft. from [E x\ddotx line. se/4	is located _	890		
(1/4 Se	c. & Sec. No.)	(Twp.)		
The well will be used to inject co2 & Wat	ter into	othe Bu	rbank Sand	
for Kale South (Fluid 1 for Kale South (End of the Water Lake Blvd., Oklahoma Cit	Type) vell operator's cy, OK 73114	address i	(Formation Name)	
(Street/P.O. Box	/City/State/Zip C	ode)		
EPA may prepare a draft permit or a noti preparation of a draft permit or intent to defend for further information concerning the state of the concerning the co	deny, there wil atus of this ap	l be an or	portunity for public comments	
N. S. C. J.T. (management)		Perilipan Xe		
Notice Sent To: (SUPPOS COMPOS / Tenar	nt/ <b>OPERIORS</b>	Circle one	Э	
Not Applicable				
Not Applicable Name	-	<b>1</b> 0		
Name				97
Address	14			
City / State / Zip Code			8	
ony rotato responde				
I certify that the surface owner(s), the tena operator of a producing lease within one-h notice as required by 40 CFR \$147.2918.	nalf mile of the	here the lewell loca	injection well is located, and each tion was mailed a copy of this	1
Wal A Appens	2			
Owner/Operator Signature David P. Sp	encer (I	April 20 Date of No		
· ·				

### APPLICANT'S PUBLIC NOTICE OF PERMIT AND VERIFICATION (§147.2918 (b) (s) and §147.2929 (d) (ii)

Chaparral Energy, L.L.C.	is applying for a permit for a Class II
(Operator Name)	000 (1 ( -111-01 !'
injection well. Well No. NBU 14-W24 is located	890 ft. from XXXS line and
75 ft. from [E xxx line. <u>SE/4 Section 10</u> (1/4 Sec. & Sec. No.)	27N 05E
The well will be used to inject co & Water int	
(Fluid Type)	(Formation Name)
for (Chapter/enhanced recovery). The well operator's	
701 Cedar Lake Blvd., Oklahoma City, OK 73114	
(Street/P.O. Box/City/State/Zip C	ode)
EPA may prepare a draft permit or a notice of intent to preparation of a draft permit or intent to deny, there will For further information concerning the status of this appropriate of the concerning the status of the status o	Il be an opportunity for public comments.
Notice Sent To: (Surface Owner/ ************************************	Circle one
Chaparral Energy, L.L.C.	
Name	
701 Cedar Lake Blvd.	
Address	
Oklahoma City, OK 73114 City / State / Zip Code	
City / State / Zip Code	N
	9
I certify that the surface owner(s), the tenants on land operator of a producing lease within one-half mile of the notice as required by 40 CFR \$147.2918.	where the injection well is located, and each e well location was mailed a copy of this
Can to opener	April 26, 2010
Owner/Operator Signature) David P. Spencer	(Date of Notice)

Form 5-156 ± 1956

B001236

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF INDIAN AFFAIRS NATIONWIDE OIL AND GAS LEASE ROND

THATTOTT THE OTE AND GAS LEASE BOYD
KNOW ALL MEN BY THESE PRESENTS, That we, CEI Bristol Acquisition, L.P., Chaparral Energy, L.L.C., Chaparral Oil, L.L.C.
of 701 Cedar Lake Blvd., Oklahoma, OK 73114
as principals, and U.S. Specialty Insurance Company
of 13403 Northwest Freeway, Houston, TX 77040, as surety, are held and firmly bound unto the United States of America—the sum of one hundred fifty thousand (\$150,000) dollars, lawful mone of the United States for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our heirs, successors, executors, administrators, and assigns, jointly and severally firmly by these presents.
Sealed with our seals and dated the31st day ofOctober, xxx 20
The condition of this obligation is such that whereas the said principals have heretofore or may hereafter enter into or otherwise acquire an interest in oil and gas mining leases and oil and gas prospecting permits of various dates and periods of duration covering lands or interests in lands held by the United States in trust for individual Indians, or tribes or bands of Indians, or subject to trictions against alienation without the consent of the Secretary of the Interior or his authorized presentative, which leases and permits have been or may hereafter be granted or approved by the Secretary of the Interior or his authorized representative, and the identification of which herein is expressly waived by both principal s and surety hereto.
WHEREAS the principals and surety agree that the coverage of this bond shall extend to and include all extensions and renewals of leases and permits covered by this bond, such coverage to continue without any interruption due to the expiration of the term set forth therein.
WHEREAS the surety hereby waives any right to notice of any modification of any such lease or permit, or obligation thereunder whether effected by extension of time for performance, by commitment of such lease to unit, cooperative, or communitization agreement, by waiver, suspension, or charge in rental, except an increase thereof, by minimum royalty payment, except an increase thereof, by compensatory royalty payment, or otherwise, this bond to remain in full force and effect notwithstanding.
WHEREAS the principals and surety agree that the neglect or forbearance of the obligee of any such lease or permit in enforcing the payment of any rental or royalty or the performance of any other covenant, condition, or agreement of any such lease or permit shall not in any way release the

or permit, the obligee may prosecute any claim, suit, action, or other proceeding against the cipals and surety, or either of them, without the necessity of joining the other.

Now, if the said principals herein shall faithfully carry out and observe all the obligations assumed in said leases and permits to which CEI Bristol Acquisition, L.P., Chaparral Energy, L.L.C., Chaparral Oil, L.L.C.

is now or may hereafter become a party, and shall observe all the laws of the United States and regulations made, or which shall be made, thereunder, for the government of trade and intercourse with Indian tribes, and all rules and regulations that have been or shall hereafter be lawfully prescribed

WHEREAS the principals and surety agree that in the event of any default under any such lease

principal and suret y, or either of them, from any liability under this bond; and

by the Secretary of the Interior relative to said oil and gas mining leases and permits, and shall in all particulars comply with the provisions of said leases, permits, rules and regulations, then this obligation shall become null and void; otherwise, to remain in full force and effect. 25/1000; the total premium The rate of premium charged on this bond is \$\_\_\_\_\_ paid is \$\_\_\_\_\*3,750.00\*\* Signed and sealed in the presence of-WITNESSES\* omas C. CEI Bristol Acquisition, L.P., Chaparral Energy, L.L.C., Chaparral Oil, L.L.C. Thomas C. Lough P.O. 701 Cedar Lake Blvd., OKC, OK 73114 Terrell N. Lay Mark A. Fischer, Manager P.O. 701 Cedar Lake Blvd., OKC OK 73114 P.O. Ohall Both of Molly Battenfield U.S. Specialty Insurance Company 777 Post Oak Blvd., Suite 330, Houston, TX 77056 SEAL W. Russell Brown, Jr., Attorney-in-Fact 777 Post Oak Blvd., Suite 330, Houston, TX 77056 P.O. SEAL P.O. \_\_\_\_\_ P.O. \_\_\_\_\_ SEAL P.O. \* Two witnesses to each signature DEPARTMENT OF THE INTERIOR BUREAU OF INDIAN AFFAIRS DEPUTY BUREAU DIRECTOR-TRUST SERVICES 1849 C STREET, N.W., MS-4639-MIB WASHINGTON, D. C. 20240 <u> 2-16 -</u>, 2005 Approved:

Bond No.	B001236
DOLLER A TO.	200011100

### Important Notice Regarding Terrorism Risk Insurance Act of 2002

In accordance with the Terrorism Risk Insurance Act of 2002 (the "Act"), this disclosure notice is provided for surety bonds on which U.S. Specialty Insurance Company is the issuing surety.

The premium attributable to any bond coverage for "acts of terrorism" as defined in Section 102(1) of the Act is Zero Dollars (\$0.00).

The United States will reimburse the Issuing Sureties for ninety percent (90%) of any covered losses from terrorist acts certified under the Act exceeding the applicable surety deductible.

The actual coverage provided by your bond for acts of terrorism, as is true for all coverages, is limited by the terms, conditions, exclusions, penalties, limits, other provisions of your bond and the underlying contract, any endorsements to the bond and generally applicable rules of law. This Important Notice Regarding Terrorism Insurance Risk Act of 2002 is for informational purposes only and does not create coverage nor become a part or condition of the attached document.

The rest of this page is intentionally left blank.

#### POWER OF ATTORNEY

(To be used with bonds issued on behalf of U. S. SPECIALTY INSURANCE COMPANY)

now All Men by These Presents That, U. S. SPECIALTY INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Texas, and having its principal office in Houston, Harris County, Texas, does by these presents make, constitute and appoint

#### Edwin H. Frank III, W. Russell Brown, Jr.

its true and lawful Attorney-in-fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include riders, amendments, and consents of surety, providing the bond penalty does not exceed Three Million Dollars (\$3,000,000) and to bind the Company thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming that the said Attorney-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolutions of the Board of Directors of the U. S. Specialty Insurance Company:

Be it Resolved, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

Attorney-in-Fact may be given full power and authority for and in the name of and of behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

Be it Resolved, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached. (Adopted by unanimous written consent in lieu of meeting on July 7, 2003.)

In Witness Whereof, U. S. SPECIALTY INSURANCE COMPANY has caused these presents to be signed by its President, and its corporate seal to be hereto affixed this 24<sup>th</sup> of August, 2004.

porate Seal

U. S. SPECIALTY INSURANCE COMPANY By

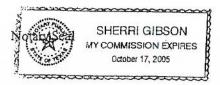
State of Texas

County of Harris

SS:

Michael I Scholl President

On this 24<sup>th</sup> of August before me personally came Michael J. Schell, to me known, who, being by me duly sworn, did depose and say, that he resides in Houston, Texas, that he is President of U. S. SPECIALTY INSURANCE COMPANY, the company described in and which executed the above instrument; that he knows the seal of said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto by like order.



\_\_\_, Notary Public

My commission expires  $\frac{10-17-0.5}{}$ 

I, Christopher L. Martin, Secretary of U. S. SPECIALTY INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Company, which is still in full force and effect; furthermore, the resolutions of the Board of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seal of said Company at Houston, Texas this \_\_\_31st\_ day of

October , 2004.

Corporate Seal

Christopher L. Martin, Secretary

Bond No.	B001236

#### ASSUMPTION OF LIABILITY RIDER

premium or consideration paid for this rider period of liability on surety bond number	rsigned principal and surety, in consideration for the additional r, if any, and the consent by the United States to terminate the 886682C, carrying the same principal and company as surety, the undersigned principal and surety hereby
	standing on surety bond number <u>886682C</u> , o properly plug and abandon all wells existing, to which surety
bond number 886682C, applies	and any unpaid rentals or royalties heretofore accruing;
above the face amount of the bond to which t	ct to increase the potential or cumulative liability of the surety this rider attaches.
18	
Executed this 31st day of _October_	, 20 <u>04</u> .
Witnesses	
	CEI Bristol Acquisition, L.P.,
$V_{i}$	Chaparral Energy, L.L.C., Chaparral Oil, L.L.C.
Name of Witness	Name of Principal
Thomas C. Lough	73114 May Metics
701 Cedar Lake Blvd., OKC, OK Address of Witness	Signature Signature
Address of Witness	2
701 Cedar Lake Blvd., OKC, OK	
Principal's Address	Name and title of person executing for Principal
Name of Witness Molly Battenfield	U.S. Specialty Insurance Company
Name of Witness Molly Battenfield	Name of Surety
777 Post Oak, Ste 330, Houston, TX 77056 Address of Witness	Signature Suff
	IV David David Foot
	W. Russell Brown, Jr., Attorney-in-Fact Name and title of person executing for Surety
	13403 Northwest Freeway, Houston, TX 77040 Surety's Address

#### POWER OF ATTORNEY

(To be used with bonds issued on behalf of U. S. SPECIALTY INSURANCE COMPANY)

w All Men by These Presents That, U. S. SPECIALTY INSURANCE COMPANY (the "Company"), a corporation duly aganized and existing under the laws of the State of Texas, and having its principal office in Houston, Harris County, Texas, does by these presents make, constitute and appoint

#### Edwin H. Frank III, W. Russell Brown, Jr.

its true and lawful Attorney-in-fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include riders, amendments, and consents of surety, providing the bond penalty does not exceed Three Million Dollars (\$3,000,000) and to bind the Company thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming that the said Attorney-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolutions of the Board of Directors of the U. S. Specialty Insurance Company:

Be it Resolved, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

Attorney-in-Fact may be given full power and authority for and in the name of and of behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

Be it Resolved, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached. (Adopted by unanimous written consent in lieu of meeting on July 7, 2003.)

In Witness Whereof, U. S. SPECIALTY INSURANCE COMPANY has caused these presents to be signed by its President, and its corporate seal to be hereto affixed this 24<sup>th</sup> of August, 2004.

Comorate Seal

U. S. SPECIALTY INSURANCE COMPANY
By

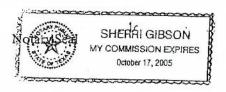
State of Texas

County of Harris

SS:

Michael I Schell President

On this 24<sup>th</sup> of August before me personally came Michael J. Schell, to me known, who, being by me duly sworn, did depose and say, that he resides in Houston, Texas, that he is President of U. S. SPECIALTY INSURANCE COMPANY, the company described in and which executed the above instrument; that he knows the seal of said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto by like order.



Notary Public

My commission expires 10-17-0-5

I, Christopher L. Martin, Secretary of U. S. SPECIALTY INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Company, which is still in full force and effect; furthermore, the resolutions of the Board of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seal of said Company at Houston, Texas this \_\_\_\_\_\_ day of

October , 20 04.

Corporate Seal

Christopher L. Martin, Secretary

#### **CERTIFICATION**

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibilities of fine and imprisonment.

Name

David F. Spencer

Manager of Regulatory Affairs
Title and Attorney-In-Fact

\*If certification is signed by a party other than the injection well owner/operator a written statement of authorization signed by the owner/operator must accompany the application.

#### LIMITED POWER OF ATTORNEY

CHAPARRAL ENERGY, L.L.C., an Oklahoma limited liability company (the "Company"), has made, constituted and appointed, and by these presents does hereby make, constitute and appoint David P. Spencer of Oklahoma City, OK, the true and lawful Attorney-in-Fact for the Company, with full power and authority in its name and on its behalf to do and perform any and all acts which are or may be necessary to execute all documents regarding State and Federal regulatory and compliance issues, which includes, but is not limited to the Minerals Management Service, Bureau of Indian Affairs and Bureau of Land Management in any of the fifty (50) states of the United States of America in the name and on the behalf of the Company.

The Company reserves the right to cancel this power of attorney or any part or portion hereof at any time, but such cancellation shall not be effective as to any party relying upon this instrument until notice of cancellation is given to any such party. It is agreed that in order to effectuate these general powers covered hereby, the Company does hereby ratify and confirm any act or actions by its attorney-in-fact heretofore or hereafter done or performed by virtue hereof.

EXECUTED this 13th day of March, 2008.

CHA	PARRAL ENERGY, L.L.C.	
Ву:	Mark A. Fischer, Manager	
	Mark A. Fischer, Manager	

STATE OF OKLAHOMA ) ss COUNTY OF OKLAHOMA )

The foregoing instrument was acknowledged before me this 13<sup>th</sup> day of March, 2008, by Mark A. Fischer in his capacity as Manager of Chaparral Energy, L.L.C.

VICKIE KILLER

Notary Public
State of Oklahoma

Gommission # 02012286 Expires 08/27/10

Notary Public

#### **United States** Department of the Interior Osage Indian Agency

Pawhuska, Oklahoma

Date:

April 7, 2010

	rbank Unit Tract 14		
Fee Lands			
(Commencement money paid to whom)	(Date)	(Amount)	
Well No.:1 is located300	Ft. from S_line and	300 Ft. from E line	
SE/4 Sec 10 27N	05E Os	sage County, Oklahoma	
(1/4 Sec. & Sec. No.) (Twp)	(Range)		
The elevation of the ground level	above sea level is	1184 Ft.	
Use This Side to Request Authority for Worl	Use This Side To I	Report Completed Work	
(Three Copies Required)	(One (	Copy Required)	
Notice of Intention To:	Character of Well (oi	I, gas or dry)	
Drill	Subsequent R		
Plug □	Conversion		
Deepen or plug back □	Formation Tre	atment. 🗆	
Convert	Altering casing	g 🗖	
Pull or alter casing ⊠	Plugging Back	<b>-</b>	
Formation Treatment.	Plugging		
Details of Work	Details of Worl	k & Results Obtained	
O Bbls oil O Bbls water in 24 hrs To reactivate & set up for production in CO2 test area Will MIRU POOH w/tbg, rods, & pump. Fish all junk from hole if needed. RIH w/bit & scraper to TD. Set CIBP at end of casing or liner. Perf & cement csg or liner to 700' above end. WOC. Shoot off & POOH w/top	,	et Wellwale wionshy proposed is BIA	
500' of csg. (or shoot every 50 ft to surface).Install new	Work commenced:		
3½" production casing w/bottom 500 ft chrome lined.	Work completed:	rouges if a second	
Cement this to surface w/DV tool set @ 600'. WOC.	(Continue on reverse if necessary)  This block for plugging information only		
RIH w/ bit & clean out to CIBP. Run CBL. Will drill	II .	ng Record	
CIBP & put on production when needed for CO2 flood. I understand that this plan of work must receive approval in writing of the Osage Indian Agency before operations may be commenced.		at Recovered If Parted Depth How	
Lessee: Chaparral Energy, L.L.C.			
Signature:	Lessee:	Original TD	
David P. Spencer			
Title: Manager of Regulatory Affairs	By:	The state of the s	
Address: 701 Cedar Lake Blvd., Oklahoma City, Oklahoma 731	Subscribed and sworn to before me thisd	aay or, 2010.	

### **United States Department of the Interior** Osage Indian Agency Pawhuska, Oklahoma

Date:

April 7, 2010

	bank Unit Tract 14				
Fee Lands (Commencement money paid to whom) (					
(Commencement money paid to whom)	Date) (Amount)				
Well No.: 7 is located 988	Ft. from S_line and300Ft. from E line				
SE/4 Sec 10 27N	05E Osage County, Oklahoma				
(1/4 Sec. & Sec. No.) (Twp)	(Range)				
The elevation of the ground level	_above sea level is1101Ft.				
Use This Side to Request Authority for Work	Use This Side To Report Completed Work				
(Three Copies Required)	(One Copy Required)				
Notice of Intention To:	Character of Well (oil, gas or dry)				
Drill	Subsequent Report of:				
Plug	Conversion □				
Deepen or plug back □	Formation Treatment. □				
Convert	Altering casing □				
Pull or alter casing	Plugging Back □				
Formation Treatment.	Plugging				
Details of Work	Details of Work & Results Obtained				
ing applications will state proposed TD & horizons to be tested. Show size & length of casings e used. Indicate proposed modding, connenting & other work. inging applications shall set forth reasons for plugging & detailed statement of proposed work  Plugging will not commence until 10 days following approvaliate unless authority granted for earlier commencement.  A \$15.00 plugging fee is also required with each application to plug.	offset Well work previously proposed				
To reactivate & set up for production in CO2 test area Will MIRU POOH w/tbg, rods, & pump. Fish all junk from hole if needed. RIH w/bit & scraper to TD. Set CIBP at end of casing or liner. Perf & cement csg or	to BIA				
liner to 700' above end. WOC. Shoot off & POOH w/top	Work commenced:				
500' of csg. (or shoot every 50 ft to surface).Install new	Work completed:				
3½" production casing w/bottom 500 ft chrome lined. Cement this to surface w/DV tool set @ 600'. WOC.	(Continue on reverse if necessary)				
RIH w/ bit & clean out to CIBP. Run CBL. Will drill	This block for plugging information only				
CIBP & put on production when needed for CO2 flood.	Casing Record				
I understand that this plan of work must receive approval in writing of the Osage Indian Agency before operations	Size In Hole When Started Arnt. Recovered If Parted Depth How				
may be commenced.					
Lessee: Chaparral Energy, L.L.C.	Original TD				
Signature:	Lessee:				
David P. Spencer	Ву:				
Title: Manager of Regulatory Affairs	Subscribed and sworn to before me this day of , 2010.				
Address: 701 Cedar Lake Blvd., Oklahoma City, Oklahoma 7311	1				

### **United States Department of the Interior** Osage Indian Agency Pawhuska, Oklahoma

Date:

April 9, 2010

North Bur Fee Lands	bank Unit Tract 15				
10	Date) (Amount)				
Well No.: 1 is located 300	_Ft. from S line and300Ft. from W line				
SW/4 Sec 11 27N	05E Osage County, Oklahoma				
(1/4 Sec. & Sec. No.) (Twp)	(Range)				
The elevation of the ground level	above sea level is 1131 Ft.				
Use This Side to Request Authority for Work	Use This Side To Report Completed Work				
(Three Copies Required)	(One Copy Required)				
Notice of Intention To:	Character of Well (oil, gas or dry)				
Drill	Subsequent Report of:				
Plug □	Conversion □				
Deepen or plug back □	Formation Treatment. □				
Convert	Altering casing □				
Pull or alter casing ⊠	Plugging Back □				
Formation Treatment.	Plugging				
Details of Work	Details of Work & Results Obtained				
Description will not commence until 10 days following approvables unless authority granted for earlier commencement.  A 315.00 plugging fee is also required with each application to plug.  D Bbls oil D Bbls water in 24 hrs To reactivate & set up for production in CO2 test area Will MIRU POOH w/tbg, rods, & pump. Fish all junk from hole if needed. RIH w/bit & scraper to TD. Set CIBP at end of casing or liner. Perf & cement csg or liner to 700' above end. WOC. Shoot off & POOH w/top 500' of csg. (or shoot every 50 ft to surface).Install new 3½" production casing w/bottom 500 ft chrome lined. Cement this to surface w/DV tool set @ 600'. WOC.	Work commenced:  Work completed:  (Continue on reverse if necessary)  This block for plugging information only				
RIH w/ bit & clean out to CIBP. Run CBL. Will drill CIBP & put on production when needed for CO2 flood.	Casing Record				
I understand that this plan of work must receive approval in writing of the Osage Indian Agency before operations	Size In Hole When Started Amt. Recovered If Parted Depth How				
may be commenced.  Lessee: Chaparral Energy, L.L.C.					
Lessee. Chapanai Chergy, L.L.C.	Original TD				
Signature: David P. Spencer	Lessee:				
Title: Manager of Regulatory Affairs	By:				
Address: 701 Cedar Lake Blvd., Oklahoma City, Oklahoma 73114	Subscribed and sworn to before me thisday of, 2010.				

## United States Department of the Interior Osage Indian Agency

Pawhuska, Oklahoma

Date: April 9, 2010 Application For the Operation or Report on Wells North Burbank Unit Tract 15 Agnus Hyatt March 20, 2024 \$100.00 (Commencement money paid to whom) (Date) (Amount) Well No.: is located 300 Ft. from S line and 981 Ft. from W line SW/4 Sec 11 27N 05E Osage County, Oklahoma (1/4 Sec. & Sec. No.) (Twp) (Range) The elevation of the ground level above sea level is 1151 Ft. Use This Side to Request Authority for Work Use This Side To Report Completed Work (Three Copies Required) (One Copy Required) Notice of Intention To: Character of Well (oil, gas or dry) Drill..... Subsequent Report of: Plug..... Conversion..... Deepen or plug back.. Formation Treatment. Convert..... □ Altering casing..... □ Pull or alter casing..... ⊠ Plugging Back...... □ Formation Treatment. Plugging..... ...... 🗖 **Details of Work Details of Work & Results Obtained** ing applications will state proposed TD & horizons to be tested. Show size & length of casings used. Indicate proposed mudding, cementing & other work. .ugging applications shall set forth reasons for plugging & detailed statement of proposed work Plugging will not commence until 10 days following approvabate unless authority granted for Spet well worke previously proposed earlier commencement. A \$15.00 pluzging fee is also required with each application to plug Bbls water in 24 hrs Bbls oil To reactivate & set up for production in CO2 test area Will MIRU POOH w/tbg, rods, & pump. Fish all junk from hole if needed. RIH w/bit & scraper to TD. Set CIBP at end of casing or liner. Perf & cement csg or liner to 700' above end. WOC. Shoot off & POOH w/top Work commenced: 500' of csg. (or shoot every 50 ft to surface). Install new Work completed: 3½" production casing w/bottom 500 ft chrome lined. (Continue on reverse if necessary) Cement this to surface w/DV tool set @ 600'. WOC. This block for plugging information only RIH w/ bit & clean out to CIBP. Run CBL. Will drill Casing Record CIBP & put on production when needed for CO2 flood. Size In Hole When Started Amt. Recovered If Parted I understand that this plan of work must receive approval in Depth writing of the Osage Indian Agency before operations may be commenced. Lessee: Chaparral Energy, L.L.C. Original TD Signature: Lessee: David P. Spencer By: Title: Manager of Regulatory Affairs

Address: 701 Cedar Lake Blvd., Oklahoma City, Oklahoma 73114

Subscribed and sworn to before me this \_\_\_\_\_day of \_\_\_\_

### **United States Department of the Interior** Osage Indian Agency Pawhuska, Oklahoma

Date:

April 9, 2010

Application For	the	Operation	or	Report	on	Wells
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North Bur Fee Land	bank Unit Tract 15				
10	Date) (Amount)				
Well No.: 10A is located 927	Ft. from N line and 927 Ft. from W line				
SW/4 Sec 11 27N	05E Osage County, Oklahoma				
(1/4 Sec. & Sec. No.) (Twp)	(Range)				
The elevation of the ground level	above sea level is 1089 Ft.				
Use This Side to Request Authority for Work	Use This Side To Report Completed Work				
(Three Copies Required)	(One Copy Required)				
Notice of Intention To:  Drill	Character of Well (oil, gas or dry)  Subsequent Report of:  Conversion				
Details of Work  ing applications will state proposed TD & horizons to be tested. Show size & length of casings used. Indicate proposed mudding, cementing & other work.  sering applications shall set forth reasons for plugging & detailed statement of proposed work.  Plugging will not commence until 10 days following approvablate unless authority granted for earlier commencement.  A \$15.00 plugging fee is also required with each application to plug.	Details of Work & Results Obtained				
0 Bbls oil 0 Bbls water in 24 hrs To reactivate & set up for production in CO2 test area Will MIRU POOH w/tbg, rods, & pump. Fish all junk from hole if needed. RIH w/bit & scraper to TD. Set CIBP at end of casing or liner. Perf & cement csg or liner to 700' above end. WOC. Shoot off & POOH w/top 500' of csg. (or shoot every 50 ft to surface).Install new 3½" production casing w/bottom 500 ft chrome lined. Cement this to surface w/DV tool set @ 600'. WOC.	Work commenced:  Work completed:  (Continue on reverse if necessary)  This block for plugging information only				
RIH w/ bit & clean out to CIBP. Run CBL. Will drill CIBP & put on production when needed for CO2 flood. I understand that this plan of work must receive approval in writing of the Osage Indian Agency before operations may be commenced.  Lessee: Chaparral Energy, L.L.C.	Casing Record  Size In Hole When Started Amt. Recovered If Parted Depth How				
Signature:	Original TD				
Title: Manager of Regulatory Affairs  Address: 701 Cedar Lake Blvd., Oklahoma City, Oklahoma 73114	By: Subscribed and sworn to before me thisday of, 2010.				